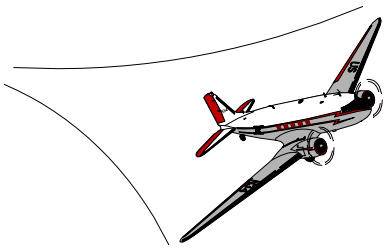
SPECIAL AIRWORTHINESS INFORMATION BULLETIN



Aircraft Certification Service
Washington, DC

U.S. Department
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This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, owners and operators of **Piper PA-32, PA-28-235 and PA-28-236 series airplanes**, of a potentially ineffective fuel selector stop which could allow the fuel selector to be moved to the off position without a separate and distinct action as required by FAR 23.995(g)(1).

Background

In May 2000, during an instructional flight, a Piper PA-32R-301's engine stopped, forcing the student pilot and instructor to land. The aircraft struck a tree and damaged the right wing and fuselage structure. During the accident investigation, the FAA found that the student pilot had turned the fuel selector from the right tank position to the off position. The student pilot told us that he believed he had selected the left tank because the lever stopped at what he thought was the left tank position. However, we found that the fuel selector valve could be moved to the off position without pushing the stop/detent down.

The fuel selector stop/detent on a PA32R-301 is mounted on a plastic fuel panel located on the cabin floor between the pilot and copilot seats. We removed the panel and found that the spring steel arm of the stop/detent attached to the panel was bent in a manner allowing the selector to go to the off position. You could to this without having to press the stop/detent down in a separate and distinct action. **The bend in the stop/detent** was not apparent while the panel was mounted in place.

The flight school operating the PA32 also operates two other airplanes of the same type. We inspected those airplanes and found that one of them had a fuel selector valve that could be moved to the off position without pushing the stop/detent down. However, this valve did not have a bent stop arm similar to the accident aircraft. In this case, the plastic panel that housed the stop was not positioned properly allowing the selector handle to be pushed forward bypassing the stop/detent and thereby going into the off position.

Also, we have records of two other accidents occurring 1980 and 2001 with similar situations. In one, the plastic panel was not secured and had slipped out of position allowing the selector to be placed in the off position without contacting the stop/detent.

It appears that damage is occurring during maintenance or operation. This damage could result from forcing the lever past the stop/detent, stepping on the lever/cover when entering or exiting the aircraft, etc. In one of the incidents above, it appears that maintenance may not have reinstalled the plastic panel properly. The pilot could not detect the problem.

Recommendation

We recommend that you watch for damage or improper reassembly of the fuel selector stop/detent. **This could result in selecting fuel to the off position** without depressing the stop/detent, which could cause engine stoppage.

> ***Note:*** *Based on current information, we only recommend these actions. We will continue this investigation and analyze any added information. We may require additional actions, such as issuing an Airworthiness Directive.*

For Other Information Contact

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